MARKED-UP VERSION OF CLAIMS

1. (amended) A method for cloning [of intact diversity-selected] one or more genes [from within gene cassettes, said] in a cassette array, the array being characterized by a plurality of genes where each gene is embedded in a predictable sequence context including a repeat DNA sequence, the method comprising the steps of:

(a) identifying the repeat sequence [flank gene cassettes] in the cassette array;

(b) hybridizing oligonucleotide [to said repeated sequences which flank said gene cassettes and amplifying said seuences to provide] primers to repeat sequences and amplifying the DNA between the primers to produce DNA fragments which contain [genes from within the cassettes] one or more genes; and

(c) ligating the [said] DNA fragments into a vector for cloning the on or more genes in a host cell. [; and]

[(d) transforming said vector into an appropriate strain.]

2. (amended) The method of claim 1 wherein [said diversity-selected] the one or more genes are selected from the group of peptides consisting of: [cell surface antigens such as polysaccharide antigens or polypeptide antigens or secreted molecules;] adhesins, [such as fimbrial proteins,] pilus proteins [or] and outer membrane proteins; transporter[s of small molecules, especially those with narrow specificity;] peptides; toxins; hemolysins; hemagglutins; [kinases and] signaling [molecules;] peptides; detoxifying enzymes; catabolic enzymes specific for compounds episodically available, excluding compounds in the tricarboxylic acid cycle; and enzymes for biosynthesis of rare sugars, excluding ribose, deoxyribose; and sugars of the cell wall and the pericellular envelope.

[detoxifying enzymes such as drug resistance determinants; catabolic enzymes specific for compounds episodically available, excluding those required for central metabolic pathways such as the tricarboxylic acid cycle; enzymes for biosynthesis of rare sugars, excludiing those required in all cells, such as ribose, deoxyribose, and sugars of the cell wall, especially of those sugars that form part of the pericellular envelope.]

18. (new) The method of claim 2, wherein the adhesins are fimbrial proteins.

19. (new) The method according to claim 2, wherein the signaling peptides are kinases.

20. (new) The method according to claim 2, wherein the detoxifying enzymes are drug resistance determinants.